

CLAIMS

1. A fluorescent lamp comprising:
a bulb provided with a pair of electrode coils at both ends thereof,
5 each of the electrode coils mounted between two lead wires held by a
bulb-end glass,
wherein a means for preventing overheating of the bulb-end glass is
mounted between the lead wires located between the electrode coil and the
bulb-end glass, the means for preventing overheating connects the lead
10 wires electrically just before or after the electrode coil is disconnected.

2. The fluorescent lamp according to claim 1, wherein the means for
preventing overheating includes a glass member and a first and a second
metallic pin for supporting the glass member,
15 one end of each of the first and the second metallic pin is connected
to the lead wires, respectively,
the first and the second metallic pin are provided not in contact with
each other.

20 3. The fluorescent lamp according to claim 2, wherein the other ends of
each of the first and the second metallic pin are spaced apart via the glass
member.

25 4. The fluorescent lamp according to claim 2, wherein at least one of
the first and the second metallic pin is wound around the glass member.

30 5. The fluorescent lamp according to claim 2, wherein the other end of
one of the first and the second metallic pin is projected from the glass
member or positioned therein, and the other metallic pin is wound around
the glass member.

35 6. The fluorescent lamp according to claim 2, wherein the other end of
one of the first and the second metallic pin is projected from the glass
member or positioned therein, and the other metallic pin is wound around
the glass member with the other end thereof positioned in the glass
member.

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7. The fluorescent lamp according to any one of claims 4 to 6, wherein the glass member has a depression formed on a circumferential surface thereof, and the metallic pin is wound around the depression.

5 8. The fluorescent lamp according to claim 2, wherein a metallic band is wound around the glass member.

9. The fluorescent lamp according to claim 8, wherein the other end of the metallic pin is connected to the metallic band.

10 10. The fluorescent lamp according to claim 2, wherein a metallic band is wound around at least both ends of the glass member, and the other end of each of the first and the second metallic pin is connected to the metallic band, respectively.

15 11. The fluorescent lamp according to claim 8 or 10, wherein the metallic band is in the form of a net.

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20 12. The fluorescent lamp according to claim 2, wherein at least one of the first and the second metallic pin has a substantially annular portion at the other end thereof, and the other metallic pin is inserted through the substantially annular portion.

25 13. The fluorescent lamp according to claim 2, wherein the means for preventing overheating further includes a metallic container in which the glass member is housed,
at least one of the first and the second metallic pin supports the glass member indirectly by supporting the metallic container, and
the glass member is housed in the metallic container so that a portion of the glass member is exposed to a discharge space.

30 14. The fluorescent lamp according to claim 13, wherein the portion of the glass member exposed to the discharge space faces to the electrode coil.

35 15. The fluorescent lamp according to claim 13, wherein one of the metallic pins is inserted into the glass member, and the other is connected to the metallic container.

16. The fluorescent lamp according to claim 15, wherein one of the metallic pins, which has been inserted into the glass member, has a fastener, the fastener comes into contact with an end surface of the glass member, and a length of the glass member is longer than a depth of the metallic container in an insertion direction of the metallic pin.

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17. The fluorescent lamp according to claim 13, wherein an end of an opening of the metallic container is bent inward.

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18. The fluorescent lamp according to claim 13, wherein the metallic container is held by the first and the second metallic pin via an electrical insulator, and both metallic pins are provided in close proximity in the glass member.

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19. The fluorescent lamp according to claim 2, wherein a surface of the glass member is coated with a non-conductive inorganic heat-resisting material.

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20. The fluorescent lamp according to claim 19, wherein the first and the second metallic pin are inserted into the glass member, and a distance between the metallic pins is substantially equal to or shorter than an insertion length of the metallic pin into the glass member.

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21. The fluorescent lamp according to claim 19, wherein the first and the second metallic pin are inserted into the glass member, and a point of the metallic pin in the glass member differs from a portion that continues on to the point in cross section, or has a thickness larger than that of the portion that continues on to the point.

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22. The fluorescent lamp according to claim 19, wherein the inorganic heat-resisting material has a melting point in excess of 200 °C or more above a softening point of the glass member.

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23. The fluorescent lamp according to claim 2, wherein a substance having a lower work function is attached to a surface of the metallic pin.

24. The fluorescent lamp according to claim 1, wherein the means for

preventing overheating includes a glass member mounted between the lead wires and a means for preventing falling of the glass member from the lead wires during melting.

5 25. The fluorescent lamp according to claim 24, wherein the means for preventing falling is provided on a circumference of the glass member.

10 26. The fluorescent lamp according to claim 24, wherein the means for preventing falling is formed of a non-conductive inorganic heat-resisting material or a metallic band.

15 27. The fluorescent lamp according to claim 1, wherein the means for preventing overheating includes a glass member, and an electrical volume resistance of the glass member is lower than that of the bulb-end glass.

20 28. The fluorescent lamp according to claim 1, wherein the means for preventing overheating includes a glass member, and an electrical conduction between the lead wires through the glass member is continued just before or after the electrode coil is disconnected.

25 29. The fluorescent lamp according to claim 1, wherein at least a portion of a surface of the bulb-end glass in the lamp is coated with a non-conductive inorganic heat-resisting material.

30. The fluorescent lamp according to claim 1, wherein the means for preventing overheating is located closer to the electrode coil than to the bulb-end glass.

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